

Section II (Remarks)**A. Summary of Amendment to the Claims**

By the present Amendment, claim 1 has been amended and claims 4 and 5 have been cancelled. Claims 2, 3 and 14-19 were previously cancelled. No new matter within the meaning of 35 U.S.C. §132(a) has been introduced by the foregoing amendments.

Specifically the amendments to claim 1 are supported by the language of claims 4 and 5, now cancelled and in Example 1.

The amendments made herein are fully consistent with and supported by the originally-filed disclosure of this application.

B. Rejection of Claims Under 35 U.S.C. §112, First Paragraph – Written Description

In the Office Action mailed October 7, 2010 the examiner rejected claims 1 and 5-13 under 35 U.S.C. §112, first paragraph as failing to comply with the written description requirement. In particular the examiner alleged that recitation of the C-terminal end of the *FadL* protein was not sufficiently descriptive to demonstrate that applicants had possession of the claimed invention at the time of filing of the application.

Applicants respectfully direct the examiner's attention to Section I above, where claim 1 has been amended to recite that the particular portion of the *fadL* gene that has been removed is "all of the base sequence following the ninth loop of the *fadL* gene..." Support for the amendment is provided in the language of previously pending claim 4, which was not rejected as lacking written description.

As amended, claim 1 does not recite "any C-terminal truncation," but a particularly described truncation. The amended claim contains both structural and functional recitations with regard to the claimed vector encoding the target protein. Applicants respectfully submit that the claim, as amended, is supported by the specification and complies with the written description requirement.

By the present Amendment, claim 5 is cancelled. Claims 6-13 are in compliance with the written description requirement for the same reasons advanced above with regard to claim 1, from which claims 6-13 depend. Withdrawal of the rejection is respectfully requested.

C. Rejection of Claims Under 35 U.S.C. §112, Second Paragraph – Indefiniteness

In the Office Action mailed October 7, 2010 the examiner rejected claims 1 and 4-13 under 35 U.S.C. §112, second paragraph as indefinite. In particular the examiner alleged that recitation of the phrase “the C-terminal end of the FadL protein has been removed” was indefinite in that “this does not make clear what amino acids are removed.” (Office Action mailed October 7, 2010, p. 7.)

The examiner’s attention is respectfully directed to Example 1 of the present application. In Example 1, the applicants described obtaining the *E. coli* outer membrane protein (FadL) gene from which the C-terminal end was removed, *i.e.*, the DNA fragment of an *fadL* gene from which all of the base sequence following the ninth loop of the *fadL* gene was removed. As described at page 13, line 24 to page 14, line 3 in Example 1, such DNA fragment was separated and found to have a size of about 1100bp. Further, the full sequence of the *fadL* gene has been well known in the art and the nucleotide sequence is deposited as GenBank accession No. U00096.

As supported by the language of claims 4, now cancelled and Example 1, claim 1 has been amended by the present response to cancel the language “the C-terminal end of the FadL protein” and to add the language “all of the base sequence following the ninth loop of the *fadL* gene...” instead.

As such, claim 1 is supported by the specification by the description of all of the FadL protein, the *fadL* gene the truncation of “all of the base sequence following the ninth loop of the *fadL* gene” and the resulting DNA fragment. As amended, claim 1 is sufficiently definite to comply with the requirements of 35 U.S.C. § 112, second paragraph. Claims 6-13 are correspondingly definite, for the same reasons advanced above with regard to claim 1, from which claims 6-13 depend. Withdrawal of the rejection is respectfully requested.

CONCLUSION

Based on the foregoing, all of Applicants' pending claims 1 and 6-13 are patentably distinguished over the art, and in form and condition for allowance. The examiner is requested to favorably consider the foregoing, and to responsively issue a Notice of Allowance.

The time for responding to the October 7, 2010 Office Action without extension was set at three months, or January 7, 2011. Applicants hereby request a two month extension of time under 37 CFR § 1.136 to extend the deadline for response to March 7, 2011. Payment of the extension fee of \$245.00 specified in 37 C.F.R. § 1.17(a)(2), as applicable to small entity, is being made by on-line credit card authorization at the time of EFS submission of this Response. Should any additional fees be required or an overpayment of fees made, please debit or credit our Deposit Account No. 08-3284, as necessary.

If any issues require further resolution, the examiner is requested to contact the undersigned attorneys at (919) 419-9350 to discuss same.

Respectfully submitted,

/steven j. hultquist/
Steven J. Hultquist
Reg. No. 28,021
Attorney for Applicants

/kelly k. reynolds/
Kelly K. Reynolds
Reg. No. 51,154
Attorney for Applicants

HULTQUIST IP
P.O. Box 14329
Research Triangle Park, NC 27709
Phone: (919) 419-9350
Fax: (919) 419-9354
Attorney File No.: 4240-148

The USPTO is hereby authorized to charge any deficiency or credit any overpayment of fees properly payable for this document to Deposit Account No. 08-3284